



COURSE: 2014-2015

DEGREE: Aerospace Engineering

YEAR: 4

TERM: 1

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Indicate YES/NO If the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	✓ Introduction to structural dynamics. 1DOF systems				NO		1,6	7
1	2	✓ Exercises on 1 DOF systems				NO		1,6	
2	3	✓ N-DOF systems				NO		1,6	7
2	4	✓ Exercises on N-DOF systems				NO		1,6	
3	5	✓ Continuous systems				NO		1,6	7
3	6	✓ Exercises on continuous systems						1,6	
4	7	✓ Rotary wing aerodynamics. Vertical flight				NO		1,6	7
4	8	✓ V/STOL and Rotary Wing Aircraft						1,6	
5	9	✓ Introduction to helicopter technology				NO		1,6	7
5	10	✓ Exercises on rotary wing aerodynamics. (vertical). ✓ Rotary wing aerodynamics. Forward flight						1,6	
6	11	✓ Exercises on rotary wing aerodynamics.				NO		1,6	7

		Forward flight							
6	12	✓ Helicopter performance						1,6	
7	13	✓ Exercises on helicopter performance				NO		1,6	7
7	14	✓ Helicopter design and operation						1,6	
8	15	✓ Introduction to mechanism.	X			NO	It is required the use of compass, a 45° and 60/30° set-squares, a rule and a protractor (please bring this stuff to class)	1,6	7
8	16	✓ Introduction to mechanism: Problems		X			This session will be performed in a computer room (It will be used PTC-Creo)	1,6	
9	17	✓ Drives I: Gears	X			NO	Theory and examples.	1,6	7
9	18	✓ Drives I: Gears problems		X			Problems	1,6	
10	19	✓ Drives I: Gears Trains	X			NO	Theory and examples.	1,6	7
10	20	✓ Drives I: Gears Trains problems		X			Problems	1,6	
11	21	✓ Drives II: Belt and friction drives	X			NO	Theory and examples.	1,6	7
11	22	✓ Drives II: Belt and friction drives problems		X			Problems	1,6	
12	23	✓ Drives III: Cams	X			NO	Theory and examples.	1,6	7
12	24	✓ Drives III: Cams Problems		X			Problems	1,6	
13	25	✓ Bearings I.	X			NO	Theory and examples.	1,6	7
13	26	✓ Bearings I:Problems		X			Problems	1,6	
14	27	✓ Bearings II.	X			NO	Theory and examples.	1,6	7
14	28	✓ Bearings II: Problems		X			Problems	1,6	
15	29	✓ Doubts	X					1,6	7
Subtotal 1								48,33	105
Total 1 (Hours of class plus student homework hours between weeks 1-14)									
15	30	✓							
16		Assessment						3	
Subtotal 2								3	3
Total 2 (Hours of class plus student homework hours between weeks 15-18)									
TOTAL (Total 1 + Total 2. Maximum 180 hours)								156	